SEQUENCE LISTING

<110> Liu, Chuan-Fa
Feige, Ulrich
Cheetham, Janet C.

<120> Thrombopoietic Compounds

<130> 01017/36263

<140>
<141>

<150> 60/105,348
<151> 1998-10-23

<160> 46

<170> PatentIn Ver. 2.0

<210> 1
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 1
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
1 5 10

<210> 2
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<220>
<223> Peptide is a subunit of a homodimer: Subunits in the dimer are covalently bonded at each carboxy terminus through peptide linkage with NH2-CH2-CH2-CH2-CH2-CH(CONH2)-NH-CO-CH2-CH2-NH2

<400> 2
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
1 5 10

<210> 3
<211> 684
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligonucleotide

<400> 3
atggacaaaa ctcacacatg tccaccttgt ccagctccgg aactcctggg gggaccgtca 60
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acatgcgtgg tggtggacgt gagccacgaa gaccctgagg tcaagttcaa ctggtacgtg 180
gacggcgtgg aggtgcataa tgccaagaca aagccgcggg aggagcagta caacagcacg 240
taccgtgtgg tcagcgtcct caccgtcctg caccaggact ggctgaatgg caaggagtac 300
aagtgcaagg tctccaacaa agccctccca gcccccatcg agaaaaccat ctccaaagcc 360
aaagggcagc cccgagaacc acaggtgtac accctgcccc catcccggga tgagctgacc 420
aagaaccagg tcagcctgac ctgcctggtc aaaggcttct atcccagcga catcgccgtg 480
gagtgggaga gcaatgggca gccggagaac aactacaaga ccacgcctcc cgtgctggac 540
tccgacggct ccttcttcct ctacagcaag ctcaccgtgg acaagagcag gtggcagcag 600
gggaacgtct tctcatgctc cgtgatgcat gaggctctgc acaaccacta cacgcagaag 660
agcctctccc tgtctccggg taaa 684

<210> 4
<211> 684
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 4
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tgtacgcacc accacctgca ctcggtgctt ctgggactcc agttcaagtt gaccatgcac 180
ctgccgcacc tccacgtatt acggttctgt ttcggcgccc tcctcgtcat gttgtcgtgc 240
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aggctgccga ggaagaagga gatgtcgttc gagtggcacc tgttctcgtc caccgtcgtc 600
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tcggagaggg acagaggccc attt 684

<210> 5
<211> 228
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 5
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1 5 10 15

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
20 25 30

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
35 40 45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
50 55 60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
65 70 75 80

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn

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Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
            100                 105                 110

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
        115                 120                 125

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
    130                 135                 140

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
145                 150                 155                 160

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
                165                 170                 175

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
            180                 185                 190

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
        195                 200                 205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
    210                 215                 220

Ser Pro Gly Lys
225
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<210> 6
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 6
Gly Gly Gly Lys Gly Gly Gly Gly
  1               5

<210> 7
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 7
Gly Gly Gly Asn Gly Ser Gly Gly
  1               5

<210> 8
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: peptide

<400> 8
Gly Gly Gly Cys Gly Gly Gly Gly
1 5

<210> 9
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 9
Gly Pro Asn Gly
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<210> 10
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 10
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Pro
1 5 10 15

Asn Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
20 25 30

<210> 11
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<220>
<223> Cyclic peptide; Secondary structure is maintained
by disulfide bond between intramolecular Cys
residues at positions 9 and 31

<400> 11
Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu
20 25 30

Ala Ala Arg Ala
35

<210> 12
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 12
Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Arg Leu Gln Cys Leu
20 25 30

Ala Ala Arg Ala
35

<210> 13
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 13
Ile Glu Gly Pro Thr Leu Arg Gln Ala Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Ala Leu
20 25 30

Ala Ala Arg Ala
35

<210> 14
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 14
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Lys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 15
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Lys residue at position 18 is Bromoacetylated

<220>
<223> Description of Artificial Sequence: derivatized peptide

<400> 15
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Lys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 16
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 16
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Cys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 17
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Lys at position 18 is pegylated

<220>
<223> Description of Artificial Sequence: derivatized peptide

<400> 17
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Lys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 18
<211> 36

<212> PRT
<213> Artificial Sequence

<220>
<223> Cys at position 18 is pegylated

<220>
<223> Description of Artificial Sequence: derivatized peptide

<400> 18
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Cys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 19
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 19
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Asn Gly Ser Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 20
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Monomeric subunit of a homodimer; Subunits in the homodimer are bonded by a disulfide bond between Cys residues at position 18 on each subunit

<220>
<223> Description of Artificial Sequence: peptide

<400> 20
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Cys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 21
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 21
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 22
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is derivatized at the amino teminus with a
covalently bonded immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 22
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Pro
1 5 10 15

Asn Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
20 25 30

<210> 23
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is covalently bonded at the animo and
carboxy termini to an immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 23
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Pro
1 5 10 15

Asn Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
20 25 30

<210> 24
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is copvalently bonded at the carboxy
terminus to an immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 24
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 25
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 25
Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
1 5 10 15

Gly Pro Asn Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala
20 25 30

Arg Ala

<210> 26
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 26
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 27
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<220>
<223> Cyclic peptide; Secondary structure is maintained
by disulfide linkage between intramolecular Cys
residues at positions 9 and 31

<220>
<223> Description of Artificial Sequence: peptide

<400> 27
Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu
20 25 30

Ala Ala Arg Ala
35

<210> 28
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 28
Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu
20 25 30

Ala Ala Arg Ala
35

<210> 29
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<400> 29
Ile Glu Gly Pro Thr Leu Arg Gln Ala Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Ala Leu
20 25 30

Ala Ala Arg Ala
35

<210> 30
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 30
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Lys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 31
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<220>
<223> Description of Artificial Sequence: peptide

<400> 31
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Cys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 32
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<400> 32
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Asn Gly Ser Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 33
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<220>
<223> Peptide is a subunit of a homodimer; Subunits in
the homodimer are colvantly bonded through a
disulfide bond between Cys residues at position 18
of each subunit

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<400> 33
Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly
1 5 10 15

Gly Cys Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
20 25 30

Ala Ala Arg Ala
35

<210> 34
<211> 41
<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<220>
<223> Peptide is covalently bonded at the amino terminus
to an immunoglobulin Fc region

<400> 34
Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala
1 5 10 15

Ala Arg Ala Gly Gly Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr
20 25 30

Leu Arg Gln Trp Leu Ala Ala Arg Ala
35 40

<210> 35
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 35
aaaggtggag gtggtggtat cgaaggtccg actctgcgtc agtggctggc tgctcgtgct 60

<210> 36
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 36
acctccacca ccagcacgag cagccagcca ctgacgcaga gtcggacc 48

<210> 37
<211> 66
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 37
ggtggtggag gtggcggcgg aggtattgag ggcccaaccc ttcgccaatg gcttgcagca 60
cgcgca 66

<210> 38
<211> 76
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 38
aaaaaaagga tcctcgagat tatgcgcgtg ctgcaagcca ttggcgaagg gttgggccct 60
caatacctcc gccgcc 76

<210> 39
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 39
aaaggtggag gtggtggtat cgaaggtccg actctgcgtc agtggctggc tgctcgtgct 60
ggtggtggag gtggcggcgg aggtattgag ggcccaaccc ttcgccaatg gcttgcagca 120
cgcgca 126

<210> 40
<211> 124
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 40
ccaggctgag acgcagtcac cgaccgacga gcacgaccac cacctccacc gccgcctcca 60
taactcccgg gttgggaagc ggttaccgaa cgtcgtgcgc gtattagagc tcctaggaaa 120
aaaa 124

<210> 41
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 41
Lys Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu
1 5 10 15

Ala Ala Arg Ala Gly Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro
20 25 30

Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
35 40

<210> 42
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:

oligonucleotide

<400> 42
aacataagta cctgtaggat cg 22

<210> 43
<211> 52
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 43
ttcgatacca ccacctccac ctttacccgg agacagggag aggctcttct gc 52

<210> 44
<211> 861
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 44
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caccttgtcc agctccggaa ctcctggggg gaccgtcagt cttcctcttc cccccaaaac 120
ccaaggacac cctcatgatc tcccggaccc ctgaggtcac atgcgtggtg gtggacgtga 180
gccacgaaga ccctgaggtc aagttcaact ggtacgtgga cggcgtggag gtgcataatg 240
ccaagacaaa gccgcgggag gagcagtaca acagcacgta ccgtgtggtc agcgtcctca 300
ccgtcctgca ccaggactgg ctgaatggca aggagtacaa gtgcaaggtc tccaacaaag 360
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tgatgcatga ggctctgcac aaccactaca cgcagaagag cctctccctg tctccgggta 720
aaggtggagg tggtggtatc gaaggtccga ctctgcgtca gtggctggct gctcgtgctg 780
gtggtggagg tggcggcgga ggtattgagg gcccaaccct tcgccaatgg cttgcagcac 840
gcgcataatc tcgaggatcc g 861

<210> 45
<211> 861
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 45
agatctaaac aaaattgatt aatttcctcc ttattgtata cctgttttga gtgtgtacag 60
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ggttcctgtg ggagtactag agggcctggg gactccagtg tacgcaccac cacctgcact 180
cggtgcttct gggactccag ttcaagttga ccatgcacct gccgcacctc cacgtattac 240
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tccacatgtg ggacgggggt agggccctac tcgactggtt cttggtccag tcggactgga 480
cggaccagtt tccgaagata gggtcgctgt agcggcacct caccctctcg ttacccgtcg 540

gcctcttgtt gatgttctgg tgcggagggc acgacctgag gctgccgagg aagaaggaga 600
tgtcgttcga gtggcacctg ttctcgtcca ccgtcgtccc cttgcagaag agtacgaggc 660
actacgtact ccgagacgtg ttggtgatgt gcgtcttctc ggagagggac agaggcccat 720
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<210> 46
<211> 269
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 46
Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
1 5 10 15

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
20 25 30

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
35 40 45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
50 55 60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
65 70 75 80

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
85 90 95

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
100 105 110

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
115 120 125

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
130 135 140

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
145 150 155 160

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
165 170 175

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
180 185 190

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
195 200 205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
210 215 220

Ser Pro Gly Lys Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg
225 230 235 240

Gln Trp Leu Ala Ala Arg Ala Gly Gly Gly Gly Gly Gly Gly Gly Ile

245 250 255

Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
260 265